

What is claimed is:

1. An image forming apparatus for forming an image based on digitalized medical image data, comprising:

a first image forming material-supplying section supplying a first image forming material;

a second image forming material-supplying section supplying a second image forming material, which is different from the first image forming material;

a selecting section selecting an image forming material to be output from the first and second image forming materials;

a converting section converting the digitalized medical image data to an outputting image data, which is suited to the selected image forming material;

an outputting section outputting the outputting image data onto the selected image forming material; and

a post-processing section conducting a post-processing to the selected image forming material to form a final image.

2. The image forming apparatus of claim 1, wherein each of the first image forming material and the second image forming material is a tray.

3. The image forming apparatus of claim 1, wherein the first image forming material and the second image forming

material are different in a color tone or a maximum density from each other when an image is formed on each of the first image forming materials and the second image forming material in same condition.

4. The image forming apparatus of claim 1, wherein the first image forming material and the second image forming material are different in at least one of sensitivity, transmittance and a gradient from each other.

5. The image forming apparatus of claim 1, wherein one of the first image forming material and the second image forming material has a reflective support and the other has a transparent support.

6. The image forming apparatus of claim 1, wherein the outputting section is a photo-writing device utilizing a laser scan exposure.

7. The image forming apparatus of claim 6, wherein a system of the laser scan exposure of the photo-writing device is a laser scan exposing system in which an angle of an exposed surface and a laser beam is not substantially perpendicular, a longitudinally multi laser scan exposing system utilizing a laser beam has plural exposing wavelengths, or a laser scan exposing system in which the

laser scan exposure is conducted by two or more of laser beams.

8. The image forming apparatus of claim 6, wherein an emission wavelength of a laser source utilized in the photo-writing device is in a range of 600 to 1200 nm.

9. The image forming apparatus of claim 8, wherein the emission wavelength is in a range of 750 to 850 nm.

10. The image forming apparatus of claim 1, wherein the post-processing section is a heat-processing device.

11. The image forming apparatus of claim 10, wherein the image forming apparatus suffices the following relationship,
$$1200 \leq t \times T \leq 2600 \text{ [sec} \cdot \text{ }^\circ\text{C]}$$

wherein t is a time period, the selected image forming material being subjected to a heat-processing; and T is a temperature of a surface of the heat-processing device where the selected image forming material contacts.

12. The image forming apparatus of claim 11, wherein the image forming apparatus suffices the following relationship,

$$1480 \leq t \times T \leq 1860 \text{ [sec} \cdot \text{ }^\circ\text{C]},$$

wherein t and T are the same as in claim 11.

13. The image forming apparatus of claim 1, wherein the converting section has at least one of a resolution-

converting function, a gradient-converting function, a color-converting function and an LUT converting function.

14. The image forming apparatus of claim 13, wherein the converting section has at least one of the resolution converting function, the gradient-converting function and the color-converting function.

15. The image forming apparatus of claim 13, wherein the converting section has the LUT-converting function.

16. An image forming method for forming an image based on a digitalized medical image data, comprising:

selecting an image forming material to be output from plural image forming materials, which are different from each other;

converting the digitalized medical image data to an outputting image data, which is suited to the selected image forming material;

outputting the outputting image data onto the selected image forming material; and

conducting a post-processing to the selected image forming material after the outputting step to form a final image.

17. The image forming method of claim 16, wherein the plural image forming materials are different in a color tone

or a maximum density from each other when an image is formed on each of the plural image forming materials in same condition.

18. The image forming method of claim 16, wherein the plural image forming materials are different in sensitivity, transmittance or gradient from each other.

19. The image forming method of claim 16, wherein the plural image forming materials include an image forming material having a reflective support and an image forming material having a transparent support.

20. The image forming method of claim 16, wherein the outputting step is conducted by a laser scan exposure.

21. The image forming method of claim 16, wherein the post-processing is a heat processing.

22. The image forming method of claim 21, wherein the image forming method suffices the following relationship,

$$1200 \leq t \times T \leq 2600 \text{ [sec} \cdot \text{ } ^\circ\text{C]}$$

wherein t is a time period, the selected image forming material being subjected to a heat-processing; and T is a temperature of a surface of a heat-processing device where the selected image forming material contacts.

23. The image forming method of claim 22, wherein the image forming method suffices the following relationship,

$$1480 \leq t \times T \leq 1860 \text{ [sec} \cdot \text{ }^{\circ}\text{C]}$$

wherein t and T are the same as in claim 22.

24. The image forming method of claim 16, wherein the converting step is directly determined in accordance with a result of the selecting step.

25. The image forming method of claim 16, wherein the converting step includes at least one of the steps of converting resolution of the digitalized medical image data, converting gradient of the digitalized medical image data, converting color of the digitalized medical image data, and converting LUT of the digitalized medical image data.

26. The image forming method of claim 25, wherein the converting step includes at least one of the step of converting resolution of the digitalized medical image data, converting gradient of the digitalized medical image data and converting color of the digitalized medical image data.

27. The image forming method of claim 25, wherein the converting step includes the step of converting LUT of the digitalized medical image data.

28. The image forming method of claim 16, further comprising displaying the outputting image data on a displaying section.

29. The image forming method of claim 28, further comprising correcting the outputting image data for representing the outputting image data displayed by the displaying step onto the image forming material.

30. The image forming method of claim 16, further comprising checking the final image data whether a desired image has been obtained, correcting the outputting image data in accordance with a result of the checking step, outputting the corrected image data onto the image forming material, and conducting the post-processing to the image forming material.

31. The image forming method of claim 16, wherein the plural image forming materials each have a support having thereon a image forming layer, which contains a photosensitive silver halide, a photo-insensitive organic silver salt and a reducing agent, and a protective layer.

32. The image forming method of claim 31, wherein the plural image forming materials each have an intermediate layer, the image forming layer and the protective layer in that order on the support.

33. The image forming method of claim 31, wherein the plural image forming materials each have the image forming layer, a barrier layer and the protective layer in that order on the support.

34. An image forming system comprising:

a medical image data inputting apparatus including a medical image data-sending section;

a medical image data-managing apparatus including an image data-storing section and a medical image data-transferring section;

an image data-converting apparatus including an image forming material-selecting section, an image data-converting section and an outputting image data-transferring section;

and

an outputting apparatus including a first image forming material-supplying section supplying a first image forming material, second image forming material-supplying section supplying a second image forming material being different from the first image forming material, an outputting section and a post-processing section,

wherein the medical image data-inputting apparatus, the medical image data-managing apparatus, the image data-converting apparatus and the outputting apparatus are connected via a network,

wherein the medical image data-inputting apparatus sends a digitalized medical image data by the medical image

data-sending section to the medical image data-managing apparatus,

the medical image data-managing apparatus stores the medical image data in the image data-storing section; and transfers a medical image data to be output from the image data-storing section to the image data-converting apparatus,

the image data-converting apparatus selects an image forming material to be output from the first and second image forming materials by the selecting section; converts the transferred medical image data to an outputting image data being suited to the selected image forming material by the image data-converting section; and transfers the outputting image data with a result of the selection in the selecting section to the outputting apparatus by the outputting image-transferring section, and

the outputting apparatus outputs the outputting image data onto the selected image forming material, which is supplied from the first or second image forming material-supplying section in accordance with the result of selection, by the outputting section; and conducts a post-processing to the selected image forming material to form a final image.

35. The image forming system of claim 34, wherein the converting section has at least one of a resolution-

converting function, a gradient-converting function, a color-converting function and an LUT-converting function.

36. The image forming system of claim 34, wherein the medical image data-inputting apparatus is a medical image diagnosis apparatus.

37. The image forming system of claim 34, wherein the image forming system comprises two or more of the medical image data-inputting apparatus connected via the network.